

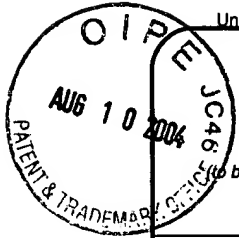
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Application Number	09/738,024	
	Filing Date	December 14, 2000
	First Named Inventor	Nate Mullen
	Art Unit	3729
	Examiner Name	Chang, Rick Kiltae
Attorney Docket Number	3768	
Total Number of Pages in This Submission	18	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re U.S. Patent Application

Applicant: Nate Mullen

Serial No.: 09/738,024

Group Art Unit No.: 3729

Filed: 12/14/2000

Examiner: Chang, Rick Kiltae

For: METHOD OF WIRING LIGHTING FIXTURES TO ACHIEVE UNIFORM VOLTAGE
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Respectfully submitted,

Dated: August 5, 2004

Joseph A. Yanny, Patent Reg. No. 29,459
Michael A. DiNardo, Patent Reg. No. 42,487
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re U.S. Patent Application

Applicant: Nate Mullen

Serial No.: 09/738,024

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SUPPLEMENTAL AUTHORITY IN SUPPORT OF APPEAL BRIEF

Appellant filed an appeal brief on the above-referenced application on August 3, 2004. At issue on appeal is whether claims 1-11 are patentable under 35 U.S.C. § 102(b) over Hunte '499. More specifically whether Hunte '499 includes uniform length lead wires, an equalizer hub, and Appellant's claimed wiring configuration. The Examiner rejected the above-referenced application stating that Appellant's claimed uniform length lead wires are disclosed in Fig. 5 of Hunte '499. Fig. 5, however, is a schematic and no reference was made in the Hunte '499 specification that the drawings were to scale or that the wires shown in the figure were of uniform length. Appellant cited to authority in its brief stating that schematic drawings do not represent precise proportions unless the patent expressly provides that such proportions are intended. As further support, Appellant would like to submit before the Board additional authority recently decided by the Federal Circuit on this issue. In *Nystrom v. Trex Co.*, 71 USPQ2d 1241 (Fed. Cir. 2004), the Federal Circuit reversed a ruling of invalidity by the district court based on a model

constructed from prior art drawings. Neither the model nor the dimensions required to construct the model from the drawings were disclosed within the patent itself. The Federal Circuit determined the district court failed to properly apply *Hockerson-Halberstadt*, 222 F.3d 951, 956 (Fed. Cir. 2000) and *In re Wright*, 569 F.2d 1124, 1127 (CCPA 1977) which stand for the principle that “arguments based on drawings not explicitly made to scale in issued patents are unavailing.” *Nystrom v. Trex Co.*, 71 USPQ2d at 1250. Accordingly, the district court’s judgment of invalidity of the patent based on anticipation was reversed. Appellant respectfully submits herewith as Exhibit A, a true and correct copy of *Nystrom v. Trex Co.*, 71 USPQ2d 1241 (Fed. Cir. 2004).

Appellant respectfully submits in light of the Federal Circuit’s decision in *Nystrom v. Trex Co.*, it would be erroneous for the Examiner to find Appellant’s claimed uniform length lead wires are disclosed by Hunte ‘499 based on the wiring depicted in Fig. 5. Accordingly, Appellant respectfully submits Hunte ‘499 does not disclose Appellant’s claimed limitation of uniform length lead wires therefore a final rejection under 35 USC § 102(b) is inappropriate.

For the foregoing reasons, it is submitted that claims 1-11 of the instant application are patentable over Hunte ‘499. Therefore, Appellant respectfully solicits the Board to reverse the decision of the Primary Examiner finally rejecting claims 1-11 and direct the Examiner to pass the application to issue.

Respectfully submitted,

Dated: August 5, 2004

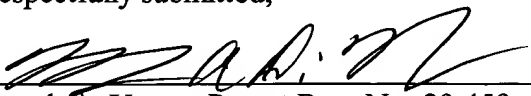

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EXHIBIT A

article? And are these features "capable of existing independently" from the utilitarian aspects? The copyright statute is concerned with protecting only non-utilitarian features of the useful article. To be copyrightable, the statute requires that the useful article's functionality remain intact once the copyrightable material is separated. In other words, Pivot Point needs to show that Mara's face is not a utilitarian "aspect" of the product "Mara," but rather a separate non-utilitarian "feature." The majority, by looking only to whether the features could also "be conceptualized as existing independently of their utilitarian function" and ignoring the more important question of whether the features themselves are utilitarian aspects of the useful article, mistakenly presupposes that utilitarian aspects of a useful article can be copyrighted. If we took away Mara's facial features, her functionality would be greatly diminished or eliminated, thus proving that her features cannot be copyrighted.

Moreover, the "process-oriented approach," advocated by the majority drifts even further away from the statute. Opinion at 35. The statute looks to the useful article as it exists, not to how it was created. I believe it simply is irrelevant to inquire into the origins of Mara's eyes, cheekbones, and neck. If such features have been fully incorporated as functional aspects of the mannequin, then copyright does not provide protection. Even if we were to look at the "process" that led to the creation of Mara, it is undeniable that, from the beginning, Pivot Point intended Mara to serve a functional purpose and commissioned her creation to fulfill that purpose (not to create a work of art for aesthetic beauty).

The majority, as evidenced by its emphasis on the fact that Charlene Products apparently copied Mara with its doll, "Liza," seems unduly concerned in this context with Charlene's questionable business practices. This is immaterial to the determination of whether the Mara doll is protected by copyright law. Importantly, other possible legal protections for Pivot Point's intellectual property—design patent, trademark, trade dress, and state unfair competition law—are available to address the majority's concerns. Copyright does not protect functional products. Charlene is free, under its own brand name, to copy and sell copies of useful articles that do not have patent protection. See, e.g., *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23 [58

USPQ2d 1001] (2001); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141 [9 USPQ2d 1847] (1989); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 [140 USPQ 524] (1964). I fear that the majority's opinion grants copyright protection to functional aspects of a useful article. I would, therefore, affirm the district court's grant of summary judgment in favor of Charlene Products and Mr. Yau.

Nystrom v. Trex Co.

U.S. Court of Appeals
Federal Circuit

No. 03-1092

Decided June 28, 2004

PATENTS

[1] Patent construction — Claims — Broad or narrow (§ 125.1303)

Patent construction — Claims — Defining terms (§ 125.1305)

Term "board," in asserted claim of patent for board used in constructing floors, is not limited to conventional wood boards cut from logs, since dictionary definitions show that ordinary meaning of "board" encompasses piece of cut wood or sawn timber as well as similarly-shaped item made of rigid material, since written description indicates that patentee did not disclaim boards made from materials other than logs, and implicitly recognizes that decking board of invention may be made from rigid materials other than wood, and since patentee's argument that prior art reference is "not concerned with materials made from wood," made in response to obviousness rejection, was not disavowal or disclaimer that claimed invention is limited to wood decking boards.

[2] Patent construction — Claims — Broad or narrow (§ 125.1303)

Patent construction — Claims — Defining terms (§ 125.1305)

Manufacturing process for claimed flooring board that is "manufactured to have" convex top surface is not limited to manufacturing process utilizing woodworking techniques,

since claimed board is not limited to conventional wood boards cut from logs, and since reference in specification to "cutting or milling or the like" is example of preferred embodiment of manufacturing process that may not be imported to restrict ordinary meaning of claim term.

[3] Patent construction — Claims — Broad or narrow (§ 125.1303)

Patent construction — Claims — Defining terms (§ 125.1305)

Asserted claim directed to flooring board manufactured to have "convex top surface" is not limited to boards having radius of curvature ratio falling within particular range, since dictionary definition of "convex" is "having a surface that bulges outward," and this definition is consistent with patent's specification, since statements made by applicant during prosecution concerning specific curvature ratios were expressly directed to single claim, and there is no indication that he intended "convex top surface" to be limited to specific radius of curvature ratio in all pending claims, and since prosecution history thus did not redefine or disclaim "convex top surface" in asserted claim to be limited to particular curvature ratio.

[4] Patentability/Validity — Anticipation — Prior art (§ 115.0703)

Patentability/Validity — Anticipation — Identity of elements (§ 115.0704)

Arguments for anticipation based on drawings not explicitly made to scale in issued patents are unavailing, since precise proportions cannot be read into patent drawings which do not expressly provide such proportions; in present case, federal district court erred in determining invalidity based on model that was made from drawings contained in prior art patent, but was not derived from drawing dimensions or written disclosure of dimensions contained directly in patent itself, since this speculative modeling premised on unstated assumptions in prior art patent drawings cannot form basis for challenging validity of claims reciting specific dimensions not disclosed directly in such prior art.

[5] Patent misuse — Federal antitrust issues (§ 140.07)

JUDICIAL PRACTICE AND PROCEDURE

Procedure — Contempt; sanctions (§ 410.49)

Federal district court did not abuse its discretion in declining to award sanctions to plaintiff, under 28 U.S.C. § 1927, for defendants' filing of amended counterclaim alleging violations of antitrust laws in action for infringement of patent for flooring board, since defendants asserted that they relied on several statements made by plaintiff during prosecution of patent indicating that he intended to monopolize markets for both milled and composite decking material, since district court's finding that statements were not limited solely to milled decking material market was not clearly erroneous, and since court therefore did not err in declining to find that defendants acted in bad faith by alleging that plaintiff posed dangerous probability of success in monopolizing relevant market.

Particular patents — Chemical — Flooring board

5,474,831, Nystrom, board for use in constructing a flooring surface, summary judgment of noninfringement and invalidity reversed.

Appeal from the U.S. District Court for the Eastern District of Virginia, Friedman, J.

Action by Ron Nystrom against Trex Co. Inc. and Trex Co. LLC for patent infringement. Plaintiff appeals from summary judgment of noninfringement and invalidity, and from order denying his motion for imposition of sanctions. Summary judgments reversed and remanded; denial of motion for sanctions affirmed. Gajarsa, J., dissenting in part in separate opinion.

Prior decision: 67 USPQ2d 1858.

Joseph S. Presta, of Nixon & Vanderhye, Arlington, Va., for plaintiff-appellant.

Patrick J. Coyne and Troy E. Grabow, of Finnegan, Henderson, Farabow, Garrett & Dunner, Washington, D.C., for defendants-appellees.

Before Mayer, chief judge, and Gajarsa and Linn, circuit judges.

Linn, J.

Ron Nystrom ("Nystrom") appeals from the grant of summary judgment of non-infringement of claims 1-15 and of invalidity of claims 18-20 of his U.S. Patent No. 5,474,831 ("the '831 patent") and from an order denying sanctions under 28 U.S.C. § 1927, entered by the United States District Court for the Eastern District of Virginia in favor of defendants TREX Company, Inc. and TREX Company, LLC (collectively "TREX"). *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. Oct. 25, 2002) (original final judgment); *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. Oct. 21, 2003) (amended final judgment). Because the district court erroneously construed certain claim limitations and erred in not properly applying our precedent relating to invalidity, we reverse the district court's summary judgments of non-infringement and invalidity and remand the case to the district court for further proceedings. Further, because the district court did not abuse its discretion in denying Nystrom's motion for sanctions under 28 U.S.C. § 1927, we affirm the district court's disposition of that motion.

I. BACKGROUND

A. The '831 Patent

The '831 patent is directed to construction material for use in flooring surfaces; specifically, boards for use in constructing an exterior floor, such as a deck. '831 patent, col. 1, ll. 6-8. The invention described and claimed in the patent is an exterior wood flooring board shaped to shed water from its upper surface while at the same time providing a surface on which it is comfortable to walk and stand. *Id.* at col. 2, ll. 8-11. In the Summary of Invention, the patent describes the invention as "a decking board which is shaped to shed water from its upper surface, and which also yields a superior product when cut from a log, reducing the amount of scrap in the outermost boards cut from a log." *Id.* at col. 2, ll. 20-24. Figure 2, reproduced below, provides a transverse sectional view of the preferred embodiment of the invention:

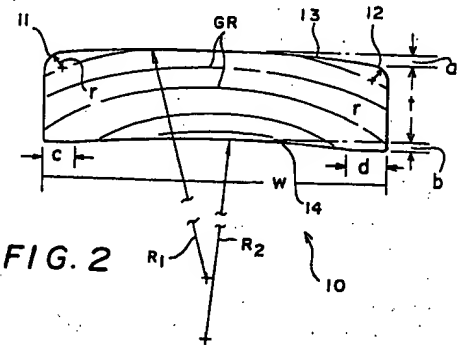


FIG. 2 *Id.* at col. 2, ll. 49-50. The embodiment depicted in Figure 2 is described in the '831 patent specification as follows:

The board specifically shown and described herein has generally the size and shape of a so-called 5/4 decking board, with rounded top side edges 11 and 12 each having a radius of curvature r of about one-quarter of an inch. The board 10 differs slightly in width w and thickness t from a standard decking board, however, in that it has a width of only about 5 inches and a thickness of about 1-3/8 inches.

More importantly, the board of the invention has a slightly rounded upper surface 13 that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1 , for example, of about 24 inches.

Further, in a preferred construction the board also has a complementally shaped concave bottom surface 14 with a radius of curvature R_2 of about 24 inches, placed to leave two relatively flat side panels c and d along opposite edges of the board.

The curved top surface has a total fall or drop a from the center to each side edge of about 1/8 of an inch, and the curved bottom surface similarly has a total recess b from the plane of the two side panels to the deepest part at the center of the board of about 1/8 of an inch.

Id. at col. 3, ll. 1-24.

Independent claim 1 contains all of the disputed claim terms, and provides (with the disputed terms highlighted):

1. A board for use in constructing a flooring surface for exterior use, said board hav-

ing a top surface, a bottom surface and opposite side edges, said top surface being *manufactured to have a slightly rounded or curved configuration from a longitudinal center line thereof downwardly toward each side edge, thereby defining a convex top surface* which sheds water and at the same time is comfortable to walk on, and said bottom surface having a concave configuration for nesting engagement with the top surface of another board so that a plurality of the boards may be stacked one on top of the other with the stability of conventional boards having flat top and bottom surfaces.

Id. at col. 4, ll. 19-30 (emphases added).

Independent claim 18 is representative of the claims for which invalidity is disputed, and provides (with the disputed limitation highlighted):

18. A decking board for use in constructing a flooring surface for exterior use, said board having a convex top surface, a bottom surface and opposite side edges; said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, *defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40*; and said convex top surface serving to shed water from said board when exposed to weather, and at the same time, when a plurality of said boards are laid in side-by-side relationship, presenting a surface that is comfortable to stand and walk on.

Id. at col. 6, ll. 16-29 (emphasis added).

B. Proceedings Below

Nystrom is the inventor and sole owner of the '831 patent. He is a working carpenter and the owner of a two-truck, two-employee lumberyard. He has been in the business of building exterior decks for twenty-five years. TREX is a manufacturer of exterior decking planks made from composites of wood fibers and recycled plastic. On December 5, 2001, Nystrom filed suit in the Eastern District of Virginia, alleging TREX infringed the '831 patent. TREX counterclaimed, seeking a declaratory judgment of non-infringement, invalidity, and unenforceability, and alleging an-

titrust violations on the part of Nystrom, his company, and his attorneys. Nystrom then filed a motion to dismiss the antitrust counterclaims. In response, TREX voluntarily dismissed the antitrust counterclaims, but then filed an amended antitrust counterclaim alleging many of the same antitrust violations against Nystrom alone. Soon after the amended counterclaim was filed, TREX dismissed its amended antitrust counterclaim, prompting Nystrom to move for sanctions on the ground that TREX's attorneys "multiplie[d] the proceedings . . . unreasonably and vexatiously." 28 U.S.C. § 1927 (2000). The district court denied the motion for sanctions under § 1927. *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. July 2, 2002) ("Sanctions Order").

In due course, the district court held a *Markman* hearing and issued a claim construction ruling concerning three disputed claim terms of the '831 patent. *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. Aug 19, 2002) ("Claim Construction Order"). Based on the district court's claim construction ruling, Nystrom conceded that he could not prove his infringement case against TREX. Therefore, Nystrom asked the district court to enter judgment of non-infringement in favor of TREX and to dismiss TREX's invalidity and unenforceability counterclaims without prejudice. TREX then moved for summary judgment of non-infringement and for summary judgment of invalidity of claims 18-20. The district court entered judgment of non-infringement of all claims and deferred ruling on the outstanding motion regarding claims 18-20. *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. Sep. 11, 2002). Subsequently, the district court granted TREX's motion for summary judgment of invalidity of claims 18-20. *Nystrom v. TREX Co., Inc.*, No. 2:01cv905 (E.D. Va. Oct. 17, 2002) ("Invalidity Order"). On October 25, 2002, the district court entered its initial final judgment. In that judgment, the invalidity and unenforceability counterclaims regarding claims 1-17 were stayed pending appeal.

Nystrom appealed the claim construction rulings, the grant of summary judgment of non-infringement based thereon, the grant of summary judgment of invalidity of claims 18-20, and the district court's denial of sanctions to this court. On August 8, 2003, we dismissed Nystrom's appeal for lack of finality in

light of the stayed invalidity and unenforceability counterclaims regarding claims 1-17. *Nystrom v. TREX Co., Inc.*, 339 F.3d 1347 [67 USPQ2d 1858] (Fed. Cir. 2003). Following the entry by the district court on October 21, 2003 of an Amended Final Judgment *nunc pro tunc* October 25, 2002 that repeated the previously entered judgments of non-infringement and of invalidity of claims 18-20 and dismissed without prejudice the remainder of TREX's declaratory judgment counterclaims regarding claims 1-17, we reinstated the appeal. *Nystrom v. TREX Co., Inc.*, 83 Fed. Appx. 321, 322 (Fed. Cir. 2003).

We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) and address the merits of Nystrom's appeal in this opinion.

II. DISCUSSION

A. Standard of Review

"We review the grant of summary judgment de novo, drawing all reasonable inferences in favor of the non-moving party." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1323 [63 USPQ2d 1374] (Fed. Cir. 2002) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986)). Summary judgment is only appropriate if there are no genuine issues of material fact and the movant is entitled to judgment as a matter of law. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1116 [227 USPQ 577] (Fed. Cir. 1985) (en banc).

Claim construction is a question of law reviewed de novo. *Ferguson Beauregard v. Mega Sys., Inc.*, 350 F.3d 1327, 1338 [69 USPQ2d 1001] (Fed. Cir. 2003). Infringement, whether literal or under the doctrine of equivalents, is a question of fact. *Id.*

This court reviews a district court's denial of a motion for sanctions under 28 U.S.C. § 1927 pursuant to the law of the regional circuit. *See Phonometrics, Inc. v. Westin Hotel Co.*, 350 F.3d 1242, 1246 [69 USPQ2d 1042] (Fed. Cir. 2003). The Fourth Circuit reviews the denial of sanctions pursuant to § 1927 for an abuse of discretion. *Chaudhry v. Gallorizzo*, 174 F.3d 394, 410 (4th Cir. 1999).

B. Claim Construction

Nystrom argues that the district court misconstrued three patent claim limitations: "board," "manufactured to have," and "convex top surface." TREX responds that the district court's claim constructions were correct.

1. "Board"

The district court construed the word "board" in independent claim 1 to mean a "piece of elongated construction material made from wood cut from a log." *Claim Construction Order*, slip op. at 9. The district court found that Nystrom had limited the scope of the claim term "board" by statements in the specification that a board is cut or obtained from a log, *id.* at 7 (citing '831 patent, col. 2, ll. 22-23; *id.* col. 2, l. 34), and statements made by Nystrom during prosecution in arguing against an obviousness rejection, *id.* at 8.

Nystrom argues that "board" in claim 1 is not limited to conventional wood boards that are cut from a log. He argues that the claim language "board" does not contain a description of the material from which the board is composed and the claim should not be so limited. He contends it was error for the district court to rely on statements in the specification to limit the claim because those statements do not represent a clear disavowal of claim scope. Moreover, Nystrom asserts that there was no disavowal in the prosecution history, because his comment in response to an obviousness rejection was not intended to limit but to establish that the resin tiles disclosed in the Yoshida reference were not properly combined with the wood planks of the Zagelmeyer reference in the examiner's § 103 obviousness rejection. Thus, Nystrom argues, the comment was not such a clear and unambiguous disclaimer as to justify limiting the claim term.

TREX responds that the ordinary meaning of "board" is a piece of sawn lumber. Because the specification only disclosed a board as made of wood and cut from a log, TREX contends that the claim term "board" must be limited to wood boards cut from a log. TREX further argues that Nystrom disclaimed non-wood boards by the statements he made during prosecution in overcoming an obviousness rejection based on Yoshida and Zagelmeyer.

We begin our claim construction analysis with the words of the claim. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 [39 USPQ2d 1573] (Fed. Cir. 1996). In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves. *Ferguson Beauregard*, 350 F.3d at 1338. "In the absence of an express intent to impart a novel meaning to claim terms, an inventor's claim terms take on

their ordinary meaning. . . . [T]he ordinary meaning must be determined from the standpoint of a person of ordinary skill in the relevant art." *Teleflex*, 299 F.3d at 1325. The ordinary and customary meaning may be determined by reviewing a variety of sources, including the claims themselves; dictionaries and treatises; and the written description, drawings, and prosecution history. *Ferguson Beauregard*, 350 F.3d at 1338. The ordinary and customary definition will be overcome if the patentee has acted as his or her own lexicographer in explicitly setting forth a definition of a claim term distinct from its ordinary meaning or if "the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Tex. Digital Sys., Inc. v. Telege-nix, Inc.*, 308 F.3d 1193, 1204 [64 USPQ2d 1812] (Fed. Cir. 2002).¹

[1] While some dictionaries define "board" solely in reference to its material composition, see *Webster's Third International Dictionary* 243 (2002) (defining "board" as "a piece of sawed lumber of little thickness but considerable surface area usu. being rectangular and of a length generally exceeding its width"), not all dictionaries are so constrained. For example, the *American Heritage Dictionary of the English Language* 203 (4th ed. 2000) defines "board" as "1. A long flat slab of sawed

lumber; a plank. 2. A flat piece of wood or similarly rigid material adapted for a special use." These definitions show that the ordinary meaning of the word "board" encompasses both a piece of cut wood or sawn timber and a similarly-shaped item made of a rigid material.²

An examination of the written description and other claims of the '831 patent reveals that Nystrom did not disclaim boards made from materials other than logs. Indeed, in the written description, Nystrom described the invention as "a decking board which is shaped to shed water from its upper surface, and which also yields a superior product when cut from a log . . ." '831 patent, col. 2, ll. 20-23 (emphasis added). The fact that the written description expressly recognizes that the decking board of the invention is "a superior product when cut from a log" implicitly recognizes that the decking board of the invention may be made of other rigid materials as well. This is consistent with the ordinary and customary meaning and supports a broader construction than that adopted by the district court. More-

² The dissent claims that this approach is contrary to the holding in *Novartis Pharmaceuticals Corp. v. Eon Labs Manufacturing, Inc.*, 363 F.3d 1306 [70 USPQ2d 1438] (Fed. Cir. 2004). *Post* at 2. The dissent states that: "In *Novartis*, we held that when the dictionary definition 'yields a range of possible meanings consisting of two competing definitions,' we look to intrinsic evidence 'to determine as a matter of claim interpretation which of the available relevant definitions should be applied to the claim term at issue.'" *Post* at 2 (citing *Novartis*, 363 F.3d at 1309-10).

The dissent overlooks our prior precedent, which holds that claim terms may be construed to encompass all dictionary definitions not inconsistent with the intrinsic record. See, e.g., *Tex. Digital Sys., Inc. v. Telege-nix, Inc.*, 308 F.3d 1193, 1203 [64 USPQ2d 1812] (Fed. Cir. 2002) ("If more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all such consistent meanings."); *Inverness Med. Switz. GmbH v. Warner Lambert Co.*, 309 F.3d 1373, 1378-79 [64 USPQ2d 1933] (Fed. Cir. 2002) ("Here there are two possibly pertinent definitions. . . . In such situations, a word that has an ordinary meaning encompassing two relevant alternatives may be construed to encompass both alternatives.").

"This court has adopted the rule that prior decisions of a panel of the court are binding precedent on subsequent panels unless and until overturned in banc. Where there is direct conflict, the precedential decision is the first." *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 [9 USPQ2d 1417] (Fed. Cir. 1988) (citing *UMC Elecs. Co. v. United States*, 816 F.2d 647, 652 n.6 [2 USPQ2d 1465] (Fed. Cir. 1987)).

¹ The dissent eschews dictionaries in the search for the ordinary and customary meaning of the words used in the claims and criticizes the majority for "fail[ing] to recognize that the written description and the prosecution history clearly prescribe that the decking board of the invention is derived from a wood log." *Post* at 2. With all due respect, the dissent places undue emphasis on the written description and prosecution history, overshadowing the fact that by statute the focus is centered on the words of the claims. As we explained in *SRI International v. Matsushita Electric Corp.*:

If everything in the specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims. Nor could an applicant, regardless of the prior art, claim more broadly than that embodiment. Nor would a basis remain for the statutory necessity that an applicant conclude his specification with "claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. It is the claims that measure the invention.

775 F.2d 1107, 1121 [227 USPQ 577] (Fed. Cir. 1985) (en banc) (plurality opinion).

over, the claims of the '831 patent reveal that if Nystrom had intended "board" to include only boards made from wood or cut from a log, he could easily have formulated his claim in such a manner. Claim 16, which is similar to claim 1, covers "[a] wood decking board for use in constructing a flooring surface for exterior use, said decking board having a convex top surface, a bottom surface, opposite side edges, and curved growth rings. . . ." *Id.* at col. 5, ll. 32-35 (emphases added). By contrast, claim 1 simply claims a "board," without restricting the term to a particular material or describing characteristics of wooden boards cut from logs. *See id.* at col. 4, ll. 19-21 ("A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges. . . ." (emphases added)).

We also consider the prosecution history, to determine whether the "patentee intended to deviate from a term's ordinary and customary meaning or that the patentee disclaimed or disavowed subject matter, narrowing the scope of the claim terms." *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 [68 USPQ2d 1516] (Fed. Cir. 2003). *See also Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 345 F.3d 1318, 1328 [68 USPQ2d 1439] (Fed. Cir. 2003) ("In the course of prosecuting a patent application, a patentee may redefine a claim term. . . [or] [a]n amendment or argument made in the course of prosecution may also serve as a disclaimer of a particular interpretation of a claim term."). In successfully overcoming a rejection based on the combination of a reference to Yoshida, which disclosed a plastic tile with curved upper and lower surfaces, and a reference to Zagelmeyer, which disclosed a wood board, Nystrom argued:

ZAGELMEYER . . . is not believed to teach the basic premises of applicant's invention, including either the specially shaped top surface or the shaped bottom surface. YOSIDA [sic] discloses a floor covering tile made from synthetic resin sheets. He laminates his tile in a particular way so that it is curved up in the middle and down at all four edges. When laid, his tile rests flat on the supporting surface and does not have either a curved top surface or a curved bottom surface. YOSIDA is clearly not concerned with materials made from wood, and especially an elongate [sic] board for exterior use having a convex top

surface when installed that will shed water and at the same time provide a surface that is suitable for supporting furniture and comfortable to walk on. There is no suggestion in this patent of providing space between stacked boards or under boards installed on a support structure for circulation of air to promote uniform drying of the boards. Consequently, it [is, sic] not believed that it would be obvious within the context of 35 U.S.C. § 103 to modify ZAGELMEYER in view of YOSIDA in order to arrive at the claimed invention.

Amendment rec'd Sept. 30, 1993, at 4 (emphasis added). TREX contends that Nystrom's argument disclaimed boards that were not made from wood cut from a log. We read Nystrom's statement that "YOSIDA [sic] is clearly not concerned with materials made from wood" not as a disavowal or disclaimer that Nystrom's claimed invention is limited to wood decking boards, but as an argument against the examiner's obviousness rejection. Nystrom argued that because the Yoshida and Zagelmeyer references disclosed inventions made of different materials and were in different arts—respectively, resin floor coverings and wood floor coverings—there was no reason, motivation, or suggestion to combine the references in a way that rendered the claimed invention obvious. *See id.* ("Consequently, it [is, sic] not believed that it would be obvious within the context of 35 U.S.C. § 103 to modify ZAGELMEYER in view of YOSIDA in order to arrive at the claimed invention."). Nystrom's statement is insufficient to restrict the scope of his claims.

We conclude that the district court erred in its claim construction of the term "board." Giving the term the full range of its ordinary and customary meaning, consistent with the written description and prosecution history, we construe the word "board" as used in claim 1 and its dependent claims, to mean an elongated, flat piece of wood or other rigid material.

2. "Manufactured To Have"

The district court construed the expression "manufactured to have" as used in claim 1 of the '831 patent to be "a manufacturing process utilizing woodworking techniques." *Claim Construction Order*, slip op. at 11. The district court relied on statements in the '831 patent specification that "the advantages of the invention" were achieved through "cut-

ting or milling and the like." *Id.* at 10. The district court found this statement in the specification, combined with its prior construction of the claim term "board" to be "construction material made from wood cut from a log," to be tantamount to a redefinition of the scope of the claimed manufacturing process. *Id.* at 11.

Nystrom argues that for many of the same reasons the district court erred in construing the word "board," the district court's construction of the phrase "manufactured to have" is also in error. Further, he argues the district court's reliance on language in the specification mentioning "cutting or milling or the like" impermissibly reads a limitation from a preferred embodiment into the claim. TREX responds that the district court properly relied on the reference to "cutting or milling and the like" in restricting "manufactured to have" in all of the claims to solely woodworking techniques. TREX argues that the district court's construction makes sense because the '831 patent covers only wood materials.

[2] In light of our prior construction of "board" as encompassing materials made not only from wood but from other rigid materials as well, we find no reason to limit the phrase "manufactured to have" in claim 1 to woodworking techniques. The district court itself acknowledged that the "cutting or milling and the like" language in the specification that informed its construction was "an example of the preferred embodiment of the manufacturing process [Nystrom] envisions." *Construction Order*, slip op. at 10. See also *Arlington Indus.*, 345 F.3d at 1327 (noting that we have consistently warned against importing limitations from preferred embodiments to restrict the ordinary meaning of a patent claim term). As used in the claim, "manufactured to have" in claim 1 of the '831 patent and the claims dependent therefrom means that the convex top surface is shaped by manufacturing. This claim limitation means exactly what it says, and the district court erred in limiting it to the manufacturing steps used to shape wood.

3. "Convex Top Surface"

The district court construed "convex top surface" to mean "an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between 4:1 to 6:1." *Claim Construction Order*, slip op. at 13. It noted that "the specification does not contain any indication that the term convex top surface is to be assigned a specific range

of curvature." *Id.* at 12. The district court relied on statements the applicant made in the prosecution history that "the preferred [radius of curvature] ration [sic, ratio] is about 5:1." *Id.* at 13.

Nystrom argues that the district court erred by ignoring the ordinary and customary meaning of this claim term, which is "an upper surface with an outward curve," and by importing additional limitations into this claim term from the specification. He observes that claim 1 does not provide an explicit radius of curvature ratio, and that such radii measurements are recited only in dependent claims 3, 7, and 13. Nystrom also argues that the district court erred in finding that he restricted the term to a specific radius of curvature to overcome a rejection based on the Zagelmeyer reference. He thus contends it was error for the court to construe "convex top surface" to include a specific radius of curvature ratio. TREX responds that the district court properly held that Nystrom limited his claim to a particular radius of curvature in the range of 4:1 to 6:1 to distinguish the invention over the prior art Zagelmeyer reference.

[3] The dictionary definition of the claim term "convex" is "having a surface or boundary that curves or bulges outward, as the exterior of a sphere." *American Heritage Dictionary of the English Language* 402 (4th ed. 2000). This is consistent with the specification of the '831 patent. See, e.g., '831 patent, col. 3, ll. 10-14 ("More importantly, the board of the invention has a slightly rounded upper surface 13 that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1 , for example, of about 24 inches."). The district court relied on statements Nystrom made during prosecution to distinguish the Zagelmeyer reference as limiting the expression "convex top surface" to a surface with radius of curvature in the range of 4:1 to 6:1. *Claim Construction Order*, slip op. at 12-13. Nystrom stated in a supplemental amendment amending claim 16 of the issued patent (referred to as claim 19 during prosecution):

Applicant then began trying different radii of curvature, but some were too shallow and when the board tried it tended not to shed water. Others had too short a radius of curvature and a distinct sensation of uneven surface. Eventually, by trying a v

riety of curvatures, applicant discovered that a ratio of radius of curvature to width of the board of about 5:1 produced the desired result, i.e., it shed water and did not produce an uneven sensation to someone standing on it.

Claim 19 [claim 16 in the issued patent] and the claims dependent therefrom (the remaining claims have been previously allowed), are directed to a decking board that has a particular configuration which produces specific results not achieved with any of the prior art. . . . *It should be noted, however, that the ratio of the radius of curvature of a board to its width can vary within certain relatively narrow limits, e.g. from about 4:1 to about 6:1, and still meet the basic objectives of the invention, although the preferred ratio is about 5:1.* Anything much outside this range does not provide satisfactory performance and/or is not acceptable to the consumer.

Supplemental Amendment, Sep. 7, 1994, at 2-3 (emphasis added). The district court noted that Nystrom's statement that "[a]nything much outside this range . . . is not acceptable" implied that his statements regarding the radius of curvature ratio applied to the entire patent, and was not intended to apply solely to issued claim 16.

The district court erred in its analysis of the prosecution history. Nystrom's statements were expressly directed to issued claim 16. There is no indication that Nystrom intended the term "convex top surface" in all of the pending patent claims to be limited to a specific radius of curvature ratio. The district court ignored the fact that the language of claim 16 at the time Nystrom made the disputed statements included the following claim language expressly providing for a radius of curvature ratio of approximately 5:1: "*said top surface having a radius of curvature that is approximately five times as great as the width of the board, thereby defining a smoothly shaped and shallow convex top surface that sheds water . . .*" Supplemental Amendment, Sep. 7, 1994, at 1 (emphasis added).

Other statements in the prosecution history support this view. Nystrom points to the examiner's prior rejection of claims 1, 2, 5, 6, 11 and 12 under 35 U.S.C. § 102(b): "This rejection

is being made over the broad claims since they fail to specify any particular degree for the curve of the board." Examiner's Action, Mar. 24, 1994, at 2. The examiner eventually allowed claims 1-14 and 18 because the "prior art fail[ed] to teach both sides of the board with a curved configuration," not because the invented board specified a particular radius of curvature ratio. Examiner's Action, Dec. 8, 1994, at 4. The prosecution history did not redefine or disclaim "convex top surface" in claim 1 to be limited to a particular radius of curvature ratio. Accordingly, we hold that the correct construction of the expression "convex top surface" as used in claim 1 is the ordinary and customary meaning of an upper surface that curves or bulges outward, as the exterior of a sphere.

In light of the foregoing revised claim constructions of the claim terms "board," "manufactured to have," and "convex top surface" as used in claim 1 of the '831 patent and claims dependent therefrom, the district court's grant of summary judgment of non-infringement cannot stand and is hereby reversed.

C. Invalidity

The district court granted summary judgment in favor of TREX, holding claims 18-20 of the '831 patent invalid as anticipated in light of the Zagelmeyer reference. The parties principally dispute whether Figure 3 of the Zagelmeyer patent anticipates the following limitation of independent claim 18:

said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, *defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40 . . .*

'831 patent, col. 6, ll. 18-25 (emphasis added). The district court held that boards 2, 3, and 5 depicted in Figure 3 of the Zagelmeyer patent anticipate this limitation by illustrating a board with a convex top having a relevant thickness ratio to the width of the board of 1:39, 1:39, and 1:37, respectively. *Invalidity Order*, slip op. at 6. The district court found that our precedents in *Hockerson-Halberstadt, Inc. v. Avia Group International, Inc.*, 222 F.3d 951 [55 USPQ2d 1487] (Fed. Cir. 2000),

and *In re Wright*, 569 F.2d 1124 [193 USPQ 332] (CCPA 1977), were not applicable, because it considered the correct inquiry to be whether a person of ordinary skill in the art would use measurements from the Zagelmeyer reference to ascertain the degree of curvature. *Invalidity Order*, slip op. at 6-7. Finding that a person of skill in the art would take such measurements from the boards depicted in Figure 3 of the Zagelmeyer patent, the district court found claim 18 and the associated dependent claims anticipated. *Id.* at 7.

Nystrom argues that the district court erred by basing its invalidity determination not on the disclosure of the Zagelmeyer patent itself, but instead from renderings made by a TREX employee of hypothetical boards based on the perspective drawings in the Zagelmeyer patent. He argues this violates our precedent in *Hockerson-Halberstadt* that "patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." *Hockerson-Halberstadt*, 222 F.3d at 956 (citing *In re Wright*, 569 F.2d at 1127). Nystrom contends that the district court erred in relying on extrinsic evidence in invalidating the '831 patent. The invalidity data relied on by the district court was generated by a TREX employee who made a software model of the boards depicted in the perspective drawings of Figure 3 of Zagelmeyer patent, then performed computations on the modeled boards to come up with the allegedly invalidating curvature to width ratio.

TREX responds that the district court correctly found that it had presented evidence that persons of ordinary skill in the art would understand Zagelmeyer to disclose the same dimensions as claims 18-20. TREX submitted declarations that it contended detailed the process by which the boards depicted in the Zagelmeyer reference were modeled and from which the invalidating measurements were taken.

"A party seeking to establish that particular claims are invalid must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing evidence." *State Contracting & Eng'g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1067 [68 USPQ2d 1481] (Fed. Cir. 2003). A patent is invalid as anticipated if every limitation in a claim is found in a single prior art reference. *Teleflex*, 299 F.3d at 1335.

[4] The district court erred in not properly applying the principles set forth in our prior precedents that arguments based on drawings not explicitly made to scale in issued patents are unavailing. *Hockerson-Halberstadt* indicated our disfavor in reading precise proportions into patent drawings which do not expressly provide such proportions:

The '792 patent is devoid of any indication that the proportions of the groove and fins are drawn to scale. [The patent owner's] argument thus hinges on an inference drawn from certain figures about the quantitative relationship between the respective widths of the groove and fins. Under our precedent, however, it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.

Hockerson-Halberstadt, 222 F.3d at 956 (citing *In re Wright*, 569 F.2d at 1127). *In re Wright* similarly noted:

We disagree with the [PTO]'s conclusion, reached by a comparison of the relative dimensions of appellant's and [the] Bauer [references]'s drawing figures, that Bauer "clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel." This ignores the fact that Bauer does not disclose that his drawings are to scale. Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value.

569 F.2d at 1127.

The district court's acceptance of TREX's invalidity arguments based on models made from drawings contained in the Zagelmeyer patent was incorrect. The basis of the district court's summary judgment of invalidity was a model that TREX developed based on that reference, and not on drawing dimensions or a written disclosure of dimensions contained directly in the patent itself. Under the principles set forth in our prior cases, the speculative modeling premised on unstated assumptions in prior art patent drawings cannot be the basis for challenging the validity of claims reciting specific dimensions not disclosed directly in such prior art. Thus, we conclude that the district court erred in granting summary judgment of invalidity based on TREX's models.

Because the district court erred in determining invalidity based on evidence improperly derived from a patent drawing, we need not address Nystrom's argument based on the district court's rejection of Nystrom's declaration. For the reasons stated, we reverse the district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by Zagelmeyer.

D. Sanctions

Section 1927, in Title 28 of the United States Code, imposes liability on counsel for excessive costs, and provides:

Any attorney or other person admitted to conduct cases in any court of the United States or any Territory thereof who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs, expenses, and attorneys' fees reasonably incurred because of such conduct.

28 U.S.C. § 1927 (2000). The Supreme Court has explained that § 1927 "is indifferent to the equities of a dispute and to the values advanced by the substantive law. It is concerned only with limiting the abuse of court processes." *Roadway Express, Inc. v. Piper*, 447 U.S. 752, 762 (1980).

Under the law of the Fourth Circuit, the district court's decision denying sanctions pursuant to 28 U.S.C. § 1927 is reviewed for an abuse of discretion. *Chaudhry*, 174 F.3d at 410. "A district court abuses its discretion if its conclusion is guided by erroneous legal principles, or rests upon a clearly erroneous factual finding." *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir. 1999) (internal citation omitted). An appellate court "is obligated to review the record and reasons offered by the district court and to reverse if the court has a definite and firm conviction that the court below committed a clear error of judgment in the conclusion it reached upon a weighing of the relevant factors." *Id.* (internal quotation marks omitted). "[S]ection 1927 also requires a finding of counsel's bad faith as a precondition to the imposition of fees." *Chaudhry*, 174 F.3d at 411 n.14 (internal quotation marks omitted). The Fourth Circuit has further held "as a matter of law that the filing of a single complaint cannot be held to have multiplied the proceedings unreasonably and vexatiously and therefore that § 1927 cannot

be employed to impose sanctions." *DeBauche v. Trani*, 191 F.3d 499, 511-12 (4th Cir. 1999).

TREX's counsel originally filed four antitrust counterclaims and a supporting brief in response to Nystrom's infringement complaint ("the original counterclaims"). TREX voluntarily dismissed these original counterclaims and then filed a second, amended antitrust counterclaim ("amended counterclaim"). TREX's counsel eventually dropped its original and amended counterclaims. Nystrom sought § 1927 sanctions against TREX. In light of *DeBauche v. Trani*, 191 F.3d 499, 511-12 (4th Cir. 1999), which held as a matter of law that the filing of a single complaint cannot multiply the proceedings unreasonably under § 1927, the district court limited its inquiry to whether TREX's filing of the amended counterclaim was a basis for sanctions in this case.

Nystrom argues that the district court erred in finding that TREX had pled all of the essential elements of an antitrust counterclaim in its amended counterclaim, because TREX failed to establish that Nystrom posed a dangerous probability of success in monopolizing the relevant market for composite decking. Nystrom argues that when TREX's counsel filed the amended counterclaim, it "knew as a matter of law" that Nystrom lacked market power in the composite decking market because TREX's counsel knew both that Nystrom was not a participant in that market and that the '831 patent itself did not create the required market power in that market. Appellant's Br. at 61-63.

TREX responds that it had ample evidentiary basis for its amended counterclaims, even though it admits its original counterclaims were flawed. TREX asserts that when the flaws in its original counterclaims were pointed out, its counsel immediately admitted the mistake and amended them. TREX argues that its counsel did not act in bad faith and that the district court did not abuse its discretion in denying § 1927 sanctions.

The district court declined to find that TREX acted in bad faith in alleging that Nystrom posed a dangerous probability of success in monopolizing the relevant market. *Sanctions Order*, slip op. at 7. Although Nystrom asserted to the district court that he operated solely in the market for milled decking material, TREX asserted that it relied on several statements by Nystrom during the prosecution

of the '831 patent that he intended to monopolize both the milled and composite decking material markets. *Id.* at 6-7. Stating that it lacked sufficient evidence to limit TREX's supporting evidence to products only in the milled decking material market, the district court declined to find bad faith on the part of TREX and award § 1927 sanctions. *Id.* at 7.

[5] Nystrom fails to establish how the district court's conclusion that it lacked sufficient evidence to find TREX acted in bad faith in filing its amended counterclaim constituted an abuse of discretion. From our review of the statements that TREX relied upon in its amended counterclaim, it is not clear which market Nystrom was referencing when he stated in the prosecution history that "licensing negotiations are presently underway with most major manufacturers and distributors of decking boards." Prelim. Amendment at 3, and the "product . . . has the potential of capturing a significant market share." Amendment rec'd Sept. 30, 1993, at 5. The district court's finding that these statements were not limited just to the milled decking material market was not clearly erroneous. The district court did not err in declining to find TREX acted in bad faith. Because there was no legal error or clearly erroneous factual finding underlying the district court's conclusion that Nystrom had failed to present sufficient evidence to justify the imposition of sanctions, *see Westberry*, 178 F.3d at 261, the court did not abuse its discretion in declining to award § 1927 sanctions.

CONCLUSION

Because the district court erred in its constructions of the claim terms "board," "manufactured to have," and "convex top surface," the district court's grant of summary judgment of non-infringement of claims 1-15 of the '831 patent is reversed. The district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by the Zagelmeyer reference is also reversed. Because the district court did not abuse its discretion, we affirm the district court's refusal to award sanctions under 28 U.S.C. § 1927 in favor of Nystrom. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED

COSTS

Costs are awarded to Nystrom.

Gajarsa, J., dissenting in part.

I agree with the majority's conclusions with respect to validity and the affirmance of the district court's refusal to award sanctions under 28 U.S.C. § 1927. However, I respectfully dissent from the majority's construction of the terms "board" and "manufactured to have."

Claim construction normally involves consideration of the claims, the specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 [34 USPQ2d 1321] (Fed. Cir. 1995) (en banc) (citations omitted). The claim language first and foremost defines the scope of the invention. *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 619-20 [34 USPQ2d 1816] (Fed. Cir. 1995). Thus, in construing claim terms, we begin with the language of the claim itself. *Johnson Worldwide Assocs. v. Zebco Corp.*, 175 F.3d 985, 989 [50 USPQ2d 1607], (Fed. Cir. 1999). As a general rule, claim terms are given the full range of their plain, ordinary, and accustomed meaning to one of ordinary skill in the art. *See id.* After revising the claim language, we consider the balance of the intrinsic evidence, including the rest of the specification and the prosecution history, if in evidence. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 [39 USPQ2d 1573] (Fed. Cir. 1996) (en banc); *Markman*, 52 F.3d at 979.

The majority gives heed to the general rules of construction but then proceeds to ascertain the "plain and ordinary meaning" of the term "board" from various dictionaries. (Maj. op. at 9). It establishes a duel between dictionary definitions and then selects one of the various definitions to support its results. The majority fails to recognize that the written description and the prosecution history clearly prescribe that the decking board of the invention is derived from a wood log. *Wang Labs. v. America Online, Inc.*, 197 F.3d 1377 [53 USPQ2d 1161] (Fed. Cir. 1999).

Moreover, the majority opinion is in direct conflict with our recently issued opinion in *Novartis Pharmaceuticals Corp. v. Eon Labs Manufacturing, Inc.*, 363 F.3d 1306 [70 USPQ2d 1438] (Fed. Cir. 2004). In *Novartis*, we held that when the dictionary definition "yields a range of possible meanings consisting of two competing definitions," *id.* at 1309-10, we look to the intrinsic evidence "to determine as a matter of claim interpretation

which of the available relevant definitions should be applied to the claim term at issue." *Id.* at 1310. We ultimately determined that, because the intrinsic evidence used the disputed term only the context of the narrower definition, that narrower definition was the meaning the term would obtain. *Id.* at 1310-11. Here we have two or more possible meanings of the term "board" and therefore we should look to the context in which the term is used in the intrinsic evidence to ascertain which of the relevant definitions should be applied. *See id.* at 1311 ("While none of the statements in the intrinsic record is an explicit disclaimer of subject matter sufficient to vary the scope of the claim from its ordinary meaning, these statements are helpful in guiding us to choose between competing dictionary definitions of a claim term." (footnotes omitted)); *see also Tex Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1203 [64 USPQ2d 1812] (Fed. Cir. 2002) ("Because words often have multiple dictionary definitions, some having no relation to the claimed invention, the intrinsic record must always be consulted to identify which of the different possible dictionary meanings of the claim terms in issue is most consistent with the use of the words by the inventor.")¹.

On appeal, Nystrom argues that the district court erred in construing "board," a term appearing in all claims of the '831 patent, to mean "a piece of elongated construction material made from wood cut from a log." As the district court acknowledged, the ordinary meaning of the term "board" does not connote that it must be made of wood cut from a log. However, as the district court concluded,

¹ The dissent sees no inconsistency between the *Novartis* decision and the cases cited as precedential by the majority, *supra* at 10 n.2. In fact, the *Novartis* decision relies on each of those cases for support. *See Novartis*, 363 F.3d at 1310. Moreover, while the majority appears to suggest that *Novartis* is not good law, the dissent posits that the *Novartis* decision simply adheres to the rule articulated in *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 [9 USPQ2d 1417] (Fed. Cir. 1988), and cited by the majority, that prior panel decisions are binding on subsequent panels unless overturned en banc. *Compare Vitronics*, 90 F.3d at 1584 ("Extrinsic evidence is that evidence which is external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles."), with *Tex. Digital*, 308 F.3d at 1203 ("[C]ategorizing [dictionaries] as 'extrinsic evidence' or even a 'special form of extrinsic evidence' is misplaced and does not inform the analysis.").

the written description and drawings, as well as the prosecution history of the '831 patent, clearly narrow "board" beyond its broad ordinary meaning.

First, the written description clearly limits the meaning of the term "board." The entire background section of the written description repeatedly refers to wood flooring. '831 patent, col. 1, ll. 16-67. For example, the background section explains that, although construction materials and methods for exterior decks and porches "changed dramatically with the advent of chemically treated lumber," which was more weather-resistant, "very little change has been made in the basic design of the wood building materials used in such exterior constructions." *Id.* at col. 1, ll. 38-51. The background section also notes that "the process used to cut such lumber from logs can produce inferior product on the outermost boards. . . ." *Id.* at col. 1, ll. 65-67. The patent professes a need for an exterior decking board that has certain attributes and that can "result in better utilization of material as the boards are cut from a log." *Id.* at col. 2, ll. 16. An object of the invention therefore is to provide a "superior product when cut from a log, reducing the amount of scrap in the outermost boards cut from a log." *Id.* at col. 2, ll. 22-23. The shaped top surface results in a configuration that "enables more usable boards to be obtained from a log." *Id.* at col. 2, l. 34.

Additionally, the figures confirm that the scope of the patent extends only to boards made of wood cut from logs. Figs. 1-5 are said to show that "the convex top surface 13 is curved in the same general direction as the curvature of the growth rings GR." *Id.*, col. 3, ll. 25-27. Figure 4 depicts the "transverse sectional view of a log, the relationship to the outer surface of the log of several outer boards to be cut from it." *Id.*, col. 2, ll. 55-57.

Nystrom characterizes boards made from logs simply as a preferred embodiment, and not the invention itself. He therefore takes issue with the district court's reliance on this court's *Wang Laboratories* decision. However, the current case is akin to *Wang Laboratories*, where this court limited "frame" of data used in online information systems to only character-based protocols, as opposed to a broader construction of "frame" encompassing bit-mapped display systems as well. *See Wang Labs.*, 197 F.3d at 1383 ("The only embodiment described in the '669 patent speci-

cation is the character-based protocol, and the claims were correctly interpreted as limited thereto." In the factual context of the specification, a board made from wood cut from logs is the invention itself, rather than merely a preferred embodiment.

Moreover, the prosecution history supports the patent's definition of a "board" as one made from wood cut from logs. In a preliminary amendment prior to the first office action, the applicant represented that "the particular configuration and dimensions of the board result in a uniformly superior product and reduction in waste or rejects due to bark or other flaws along the edges of the board when it is cut from near the outer circumference of a log." After the first office action, Nystrom stated in a September 30, 1993, amendment that "[t]he present invention represents a unique and significant advance in the art of exterior wood flooring." Responding to the examiner's rejection of certain claims as obvious in view of the Yoshida prior art reference, Nystrom stated that Yoshida "discloses a floor covering tile made from synthetic resin sheets," and that Yoshida "is clearly not concerned with materials made from wood." By this statement, Nystrom argues that the prior art disclosed resin sheets while his material was wood. He cannot now argue that his board also includes non-wood boards.

On appeal, Nystrom contends that claims 16 and 17, which claim a "wood decking board" as opposed to a board, militate in favor of interpreting these terms differently. He argues that the district court's construction upsets the "basic legal presumption that the use of different terms in the claims connotes different meanings." Although not raised by the majority, Nystrom also made a claim differentiation argument to distinguish the board definition. See *Tandon Corp. v. U.S. Int'l Trade Comm'n*, 831 F.2d 1017, 1023 [4 USPQ2d 1283] (Fed. Cir. 1987) ("There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant."). Claim differentiation only creates a presumption that each claim in a patent has a different scope; it is "not a hard and fast rule of construction." *Kraft Foods, Inc. v. Int'l Trading*

Co., 203 F.3d 1362, 1368 [53 USPQ2d 1814] (Fed. Cir. 2000) (quoting *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 [48 USPQ2d 1001] (Fed. Cir. 1998)). As discussed above, this presumption is overcome by the intrinsic evidence, which clearly shows that Nystrom limited the meaning of "board" to mean only those boards made from wood cut from logs. See *id.* (determining that "the written description and prosecution history overcome any presumption arising from the doctrine of claim differentiation"); *Multiform Desiccants, Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1480 [45 USPQ2d 1429] (Fed. Cir. 1998) (cautioning that "the doctrine of claim differentiation cannot broaden claims beyond their correct scope, determined in light of the specification and the prosecution history and any relevant extrinsic evidence"); *Tandon Corp.*, 831 F.2d at 1024 ("Whether or not claims differ from each other, one can not interpret a claim to be broader than what is contained in the specification and claims as filed.").

In sum, it is clear from the intrinsic evidence that the term "board" is limited to a wood board cut from logs.² I would therefore affirm the district court's construction of "board" as "a piece of elongated construction material made from wood cut from a log."

Nystrom also challenges the district court's determination as to the claims' disclosure that the board's top surface is "manufactured to have" a slightly rounded or curved configuration. The district court construed this "manufactured to have" term as "a manufacturing process utilizing woodworking techniques." Nystrom contends that "manufactured to have" takes its ordinary meaning and should cover all manufacturing techniques.

² The majority states that the dissent places "undue emphasis on the written description and prosecution history" in the proffered interpretation. The dissent, however, is only applying the interpretive framework dictated by this court's precedent. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 [3 USPQ2d 1321] (Fed. Cir. 1995) (en banc), *aff'd*, 51 U.S. 370 [38 USPQ2d 1461] (1996) ("Claims must be read in view of the specification, of which they are part. The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims."). *Markman*, the dissent believes, has not been overruled.

In narrowing "manufactured to have," the district court reasoned that a narrowed construction of "manufactured to have" comported with the court's construction of "board" as being made from wood cut from logs. The district court further cited to the prosecution history, in particular the applicant's September 30, 1993 amendment. The examiner had rejected claims 1, 2, 5, 6, 11, and 12 as being "anticipated by the scientific principle that a board will warp in the direction of the grain." Nystrom responded as follows:

the claims have been amended to specify that applicant's boards are *manufactured to have* the convex curvature. This would eliminate application of the scientific principle stated by the Examiner, even for those boards that do warp so that a convex top surface results.

Interpreting this passage, the district court stated that the only type of boards that will warp in the direction of the grain are wood boards, and concluded that the manufacturing process disclosed must be a woodworking technique such as cutting or milling. As the district court noted, any construction of "manufactured to have" is defined and limited by the proper construction of "board" as one being made from wood cut from logs. Viewing the claim language, phrased as "board . . . having a top surface . . . manufactured to have . . . a convex top surface," in its entirety, it is clear that any board made from wood cut from logs that is manufactured to have a convex top surface must be manufactured with a woodworking technique. In this sense, construing "manufactured to have" is somewhat redundant of the construction of "board." I would therefore affirm the district court's construction of "manufactured to have" because this term derives meaning from and rests on the district court's correct construction of "board."

Goldenberg v. Cytogen Inc.

U.S. Court of Appeals
Federal Circuit

No. 03-1409

Decided June 23, 2004

PATENTS

[1] Patent construction — Claims — Broad or narrow (§ 125.1303)

Patent construction — Claims — Defining terms (§ 125.1305)

Term "intracellular marker substance," in claims for method of detecting and localizing tumors, is properly construed to mean antigen existing wholly within cell, and thus does not encompass "transmembrane" antigen that extends both inside and outside cell, since term has no accepted meaning to one of ordinary skill in art, and thus may be construed only as broadly as patent itself allows, since specification and prosecution history indicate that patent clearly regards "antigens" as falling within scope of "marker substances," since none of 26 example antigens cited in patent associates in any manner with membranes of cells in which they are found, and written description discloses marker substances that are produced by tumors or that accumulate in structures completely internal to cell, since prosecution history supports this understanding, and since dictionary definition of "intracellular" lends additional support to narrower interpretation.

[2] Patent construction — Patent office proceedings (§ 125.05)

Patent construction — Claims — In general (§ 125.1301)

Absent its incorporation into intrinsic evidence, related patent or its prosecution history is available to construe claims of patent in suit only if related patent bears "familial relationship" to patent in suit; in present case, applications that matured into patent in suit and related patent were filed separately and were distinguished by applicant following double patenting rejection, and relevant passages in related patent that were added to its application following that rejection lack requisite formal relationship with patent in suit.

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